Industrial Hygiene & Occupational Medicine Information Clearinghouse July 2000

FIT TESTING, MEDICAL EVALUATION, AND CIVILIAN USE of MILITARY GAS MASKS

By David L. Spelce, MS, CIH

According to paragraph 1504.a. of OPNAVINST 5100.23E, military gas masks, such as the Navy's MCU-2A/P, are only authorized to be worn as protection against chemical, biological and radiological (CBR) warfare, CBR warfare training, and nuclear accidents (when used per DoD 5100.52-M). Civilian personnel who require respiratory protection against CBR agents (e.g., security personnel) are not to wear military gas masks because they are not tested and certified by the National Institute for Occupational Safety and Health (NIOSH). Companies such as Mine Safety Appliances (MSA), Minnesota Mining and Manufacturing (3M) Company, and Scott Aviation are marketing new respirators that will solve this problem.

MSA's new "Millennium RespiratorTM," is made from the same mold as the MCU-2A/P and is NIOSH approved. It is equipped with Chemical/Biological Agent-Riot Control Agent (CBA/RCA) canisters with NATO 40 mm thread like the MCU-2A/P. The Millennium Respirator CBA/RCA canisters contain the same sorbent material as the MCU-2A/P C2A1 canisters, but they are smaller - designed for continuous 8-hour use instead of 24-hour use. It is NIOSH approved for riot control gas (chloroacetphenone (CN) and chlorobenzylidene (CS)), but currently cannot be approved for nerve and blister agents because NIOSH has no certification test for the other CBR agents. The HEPA filter, in contrast to the C2A1 canister, is a true P100 filter, and is effective against the same biological agents and radiological particulates that the MCU-2A/P C2A1 canisters protect against.

The 3M Company recently launched its new product line of NIOSH approved CBR respirators. The respirators will be available as both full face negative pressure air-purifying respirators and powered air purifying respirators (PAPRs). One of the facepieces available with these respirators is a 3M version of the M-40 military gas mask, called the FR-M40 (TC-84A-3281), which is equipped with canisters that have the same capabilities as the C2A1 canisters, plus they contain additional sorbent material that will also allow their NIOSH approval for organic vapors and acid gases. The canisters will also be NIOSH approved with a HEPA (P100) filter for protection against biological agents and radiological particulates. The tight-fitting, Breathe Easy 7 PAPR and the loose-fitting, FR-57 PAPR will be equipped with canisters that provide protection from even more contaminants.

Naval Sea Systems Command is upgrading shipboard respiratory protection and is replacing the oxygen breathing apparatus aboard ship with NIOSH approved self-contained breathing apparatus (SCBA) made by Scott Aviation. These SCBA facepieces can be converted

into air-purifying respirators by installing NATO 40 mm threaded adapters (Part# 805059-01), which accept 40 mm NATO threaded CBR canisters equivalent to the C2A1 canister. By October of 2000, Scott Aviation will have its whole line of gas mask canisters NIOSH approved with 40 mm threads, including the "Super Canister," which provides CBR protection along with protection for organic vapors and acid gases.

OSHA regulations and Navy policy require that civilian personnel, such as security police forces, wear the NIOSH approved gas masks mentioned above for CBR protection. They would require medical evaluation and fit testing prior to use, per paragraphs 1508 and 1509 of OPNAVINST 5100.23E. This is in contrast to requirements for military members as stated in Chief of Naval Operations' (CNO) message (161507Z of Feb 99) which does not require fit testing and medical evaluation for the use of emergency respirators aboard ship. The military gas mask, MCU-2A/P, is included in the category of emergency use respirators. Fit testing is not specifically addressed for shore-based military personnel; although, CNO's message stated that fit testing and medical evaluation was not required prior to shipboard firefighting training at shore-based training facilities.

NOTE: The mention of manufacturers and specific models is for illustrative purposes only. It does not constitute an endorsement by the Navy Environmental Health Center or the Department of the Navy. The reader should be aware that other suitable products may also be or become available.

POC: Dave Spelce, MS, CIH, (757) 462-5524

EMPLOYMENT OPPORTUNITIES

SAFETY AND OCCUPATIONAL HEALTH MANAGER

OPEN PERIOD 06/29/2000 - 07/28/2000 SERIES/GRADE: GS-0018-12/13

SALARY: 50,139 TO \$ 59,623, ANNUAL PROMOTION POTENTIAL: GS-13

ANNOUNCEMENT NUMBER: BLM/FA-00-39

HIRING AGENCY: INTERIOR, BUREAU OF LAND MANAGEMENT

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REMARKS: BUREAU OF LAND MANAGEMENT, NATIONAL INTERAGENCY FIRE CENTER, BOISE, ID

ACTING SUPERVISOR: RON DUNTON (208) 387-5446

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OPEN PERIOD 06/30/2000 - 07/14/2000 SERIES/GRADE: GS-0018-13/13

SALARY: \$ 59,623 TO \$ 77,507, ANNUAL ANNOUNCEMENT NUMBER: HMS012509-DS

HIRING AGENCY: NAVY, Imm Ofc of Chief of Naval Operations DUTY LOCATIONS: 0001 US JOINT FORCES CMD, VA

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CONTACT: DIANE SIMMONDS

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SAFETY & OCCUPATIONAL HEALTH SPECIALIST (ART)

OPEN PERIOD 06/26/2000 - 07/07/2000

SERIES/GRADE: GS-0018-09/ SALARY: \$ 34,575.00, ANNUAL

ANNOUNCEMENT NUMBER: RT 00-176

HIRING AGENCY: Air Force Materiel Command DUTY LOCATIONS: 0001 HILL AFB OGDEN, UT

REMARKS: RELOCATION OR MOVING EXPENSES ARE NOT AUTHORIZED. THIS IS AN AIR RESERVE TECHNICIAN POSITION. APPLICANT MUST BE WILLING AND ABLE TO JOIN THE AIR FORCE

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CONTACT: DAWN SHARKEY PHONE: (801) 777-6147 DEPT OF THE AIR FORCE OO-ALC/DPCFE-2 6091 GUM LANE BLDG 1221 HILL AFB, UT 84056-5819

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OPEN PERIOD 06/21/2000 - 07/12/2000

SERIES/GRADE: GS-0018-09/11

SALARY: \$ 32,380 TO \$ 50,932, ANNUAL

PROMOTION POTENTIAL: GS-11

ANNOUNCEMENT NUMBER: KS-00-424WW

HIRING AGENCY: Eighth U.S. Army

DUTY LOCATIONS: 0001 SEOUL, KOREA, OP

CONTACT:8TH US ARMY REC OFFICE INTERNATIONAL NUMBER: 011-12067643821 INTERNET ADDRESS: http://cpol.army.mil

U.S. ARMY KOREA

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APO, AP 96218-0171

INDUSTRIAL HYGIENIST

OPEN PERIOD 06/29/2000 - 07/14/2000

SERIES/GRADE: GS-0690-11/

SALARY: 41,834 TO \$ 54,385, ANNUAL PROMOTION POTENTIAL: GS-11

ANNOUNCEMENT NUMBER: EFM07360A HIRING AGENCY: US Army Medical Command DUTY LOCATIONS: 0001 FORT HOOD, TX,TX

CONTACT: ANNIE WHITE PHONE: (410) 306-1262

INTERNET ADDRESS: annie.white@cpocner.apg.army.mil

U.S. ARMY NORTHEAST STAFFING DIVISION 314 JOHNSON STREET

ABERDEEN PROVING GRO, MD 21005-5283

SAFETY & OCCUPATIONAL HEALTH MANAGER

OPEN PERIOD 06/30/2000 - 07/13/2000

SERIES/GRADE: GS-0018-13/

SALARY: \$ 59,623 TO \$ 77,507, ANNUAL ANNOUNCEMENT NUMBER: 00JUN223486

HIRING AGENCY: AIR FORCE PERSONNEL CENTER DUTY LOCATIONS: 0001 HAMPTON VIRGINIA. VA

REMARKS: APPLICATIONS MUST BE RECEIVED BY THE CLOSING DATE TO RECEIVE

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INDUSTRIAL HYGIENIST

OPEN PERIOD 06/14/2000 - 07/05/2000 SERIES/GRADE: GS-0690-12/12

SALARY: \$ 54,003 TO \$ 70,202, ANNUAL

PROMOTION POTENTIAL: GS-12

ANNOUNCEMENT NUMBER: FDA-0-0253

HIRING AGENCY: HHS, Food and Drug Administration

DUTY LOCATIONS: 0001 ALAMEDA, CA

REMARKS: FAXED COPIES OF THIS ANNOUNCEMENT CAN BE OBTAINED BY CALLING 301-827-

4287. THE DOCUMENT NUMBER IS 00253.

PHONE: (301) 827-4070

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INDUSTRIAL HYGIENIST

OPEN PERIOD 06/23/2000 - 07/14/2000

SERIES/GRADE: GS-0690-13/13

SALARY: \$ 59,623 TO \$ 77,507, ANNUAL

PROMOTION POTENTIAL: GS-13

ANNOUNCEMENT NUMBER: OC 00-83

HIRING AGENCY: HHS, INDIAN HEALTH SERVICE DUTY LOCATIONS: 0001 OKLAHOMA CITY, OK

REMARKS: ABSOLUTE INDIAN PREFERENCE

SALARY MAY BE ADJUSTED ON PRESENT/FORMER FEDERAL EMPLOYEE RELOCATION EXPENSES

AUTHORIZED

CONTACT: LOUISE DUNCAN

PHONE: (405) 951-3807

INDIAN HEALTH SERVICE

IHS, PERSONNEL

FIVE CORPORATE PLAZA

3625 NW 56TH STREET

OKLAHOMA CITY, OK 73112

INDUSTRIAL HYGIENIST

OPEN PERIOD 06/16/2000 - 07

/21/2000

SERIES/GRADE: GS-0690-07/11

SALARY: \$ 29,998 TO \$ 53,544, ANNUAL

PROMOTION POTENTIAL: GS-11

ANNOUNCEMENT NUMBER: EFM07030 HIRING AGENCY: US Army Medical Command DUTY LOCATIONS: 0001 FORT HOOD (BELL), TX

REMARKS: No further information provided.

CONTACT: ANNIE WHITE PHONE: (410) 306-1262

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INDUSTRIAL HYGIENIST

OPEN PERIOD 06/28/2000 - 07/06/2000

SERIES/GRADE: GS-0690-12/

SALARY: \$51,204 TO \$66,564, ANNUAL

PROMOTION POTENTIAL: GS-12

ANNOUNCEMENT NUMBER: GE007503

HIRING AGENCY: US Army Corps of Eng (Except Civ Prg Fin)

DUTY LOCATIONS: 0001 BALTIMORE, MD, MD

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